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Miles Kitching

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EXAMINER

PAGE, EVAN RANDALL

ART UNIT

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4124

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,465	Applicant(s) KITCHING ET AL.	
	Examiner EVAN R. PAGE	Art Unit 4124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/17/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 42,49, 50 52 are objected to because of the following informalities:

In Reference to Claim 42:

The phrase “the least one” must be changed to “the at least one”. The word “reservior” must be changed to “reservoir”

In Reference to Claim 49-50:

Claim 49 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim, the phrase "according any preceding" must be changed to "according to any one of the preceding". See MPEP § 608.01(n). Accordingly, claims 49-50 have not been further treated on the merits.

In Reference to Claim 52:

The word “heck” must be changed to “neck”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 38-41,45-48,51-56 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,428,323 to Pugh(**Pugh**).

In Reference to Claim 38:

A sensor for use in a medical training system, the sensor comprising: a simulation of a body structure(**Fig. 1, 14, mannequin**), the body structure comprising at least one compartment for containing a mobile substance(**Col. 10, Line 10, fluid-filled sacs**); and sensing means for detecting pressure applied to the body structure(**Col. 10, Lines 11-14**).

112 sixth paragraph is interpreted to be invoked. Cited prior art for the sensing means is interpreted to be equivalent structure.

In Reference to Claim 39:

A sensor according to claim 38, wherein the sensing means senses displacement of the mobile substance from each of the at least one compartment or detects changes in the internal pressure of each of the at least one compartment(**Col. 10, Lines 11-14, water manometer detects changes in pressure based on fluid displacement**).

In Reference to Claim 40:

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A sensor according to claim 38 wherein the mobile substance is a fluid or a free flowing solid(**Col. 10, Lines 13-14, water**).

In Reference to Claim 45:

A sensor according to claim 40, wherein the mobile substance is a fluid(**Col. 10, Lines 13-14, water**) and the sensing means detects displacement of the fluid from each of the at least one compartment(**Col. 10, Lines 13-14, water manometer detects changes in pressure based on fluid displacement**) and generates a signal corresponding to the fluid displaced from the or each compartment(**Col. 10, Lines 11-14, displaced fluid**).

In Reference to Claim 46:

A sensor according to claim 45, wherein the signal corresponds to the volume of fluid displaced from each of the at least one compartment or pressure of the displaced fluid(**Col. 10, Lines 11-14, inherent property of manometer**).

In Reference to Claim 47:

A sensor according to claim 45, wherein the sensing means detects changes in the pressure of each of the at least one compartment and generates a signal corresponding to the pressure change(**Col. 10, Lines 11-14, inherent property of manometer**).

In Reference to Claim 48:

A sensor according to claim 45, wherein the sensing means detects changes in the internal pressure of each of the at least one compartment and generates a signal corresponding to the pressure change(**Col. 10, Lines 11-14, inherent property of manometer**).

In Reference to Claim 51:

A medical training system for diagnostic examinations performed on the human body by palpation comprising: a simulation of a human anatomical structure(**Fig. 1, 14, mannequin**), the anatomical structure having an outer surface(**Fig. 1, 12, outer surface of mannequin 12**) and an internal cavity(**Fig. 1, 15**); one or more sensors according to claim 38 located within the internal cavity(**Col. 10, Line 10, fluid-filled sacs**); and a feedback presentation unit(**Col. 10, Line 12, manometer**) in communication with the pressure sensing means(**Col. 10, Line 10, fluid-filled sacs**) for providing feedback to a user(**Col. 10, Line 12, manometer described as feedback presentation unit**).

In Reference to Claim 52:

A system according to claim 51, wherein the anatomical structure is selected from the group comprising a human torso, a female breast, a human head(**Fig.**

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10), a human neck(**Fig. 10, Fig. 11**), a human shoulder, a human leg, a human arm, a human axilla, a human pelvis(**Fig. 1, 12, Fig. 12**), a human knee and a human foot.

In Reference to Claim 53:

A system according to claim 51, wherein said simulation and said feedback presentation unit are adjustable to provide feedback for one of a plurality of different medical examinations(**Col. 10, Lines 11-14, multiple sacks sensing pressure**).

In Reference to Claim 54:

A system according to claim 51, wherein said medical examination comprises a set of predetermined steps and said feedback comprises an indication of completion of said set of predetermined steps(**Fig. 4, 56, exam checklist**).

In Reference to Claim 55:

A system according to claim 51, wherein the feedback presentation unit is selected from the group comprising display means(**Col. 10, Line 12, manometer**), a graphical display(**Fig. 4, 46**), a liquid crystal display and an analogue display unit.

In Reference to Claim 56:

A method of training examinations performed on the human body by palpation using a system according to claim 51 comprising the steps of: receiving signals from the sensor(**Col. 10, Lines 17-18**), wherein said signals are generated in response to palpation of the sensor(**Col. 10, Lines 16-18**); and providing feedback to a user(**Col. 10, Lines 19-21**), wherein said feedback is derived, at least in part, from said signals(**Col. 10, Lines 17-18**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 41-44, 57 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,428,323 to Pugh(**Pugh**) in view of US Patent 4,003,141 to Le Roy(**Le Roy**).

In Reference to Claim 41:

Pugh teaches:

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A sensor according to claim 40, wherein the mobile substance is a free flowing fluid.

But does not teach:

each of the at least one compartment is in communication with a fluid containing reservoir.

Le Roy teaches:

each of the at least one compartment is in communication with a fluid containing reservoir(**Fig. 1, 66, liquid source**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have added the liquid source of Le Roy to the sensor of Pugh in order to "...permit variation in the 'normal' condition. The liquid source also functions as a drain..."(**Le Roy, Col. 5, Lines 20-21**)

In Reference to Claim 42:

Pugh as modified by Le Roy for Claim 41 teaches:

A sensor according to claim 41,

But does not teach:

wherein the reservoir comprises pump means for increasing or decreasing the volume of fluid in each of the least one fluid compartment.

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Le Roy further teaches:

wherein the reservoir comprises pump means(**Fig. 1, 62**) for increasing or decreasing the volume of fluid in each of the least one fluid compartment.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have further added the pump of Le Roy to the invention as modified above in order to "...add a pulsating characteristic to the fluid..."(**Le Roy, Col. 4, Lines 60-61**)

In Reference to Claim 43:

Pugh as modified by Le Roy above teaches:

A sensor according to claim 42, wherein the pump means is connected to control means for controlling the volume of fluid in each of the at least one fluid compartment(**It is inherent that since the pump is being described a moving fluid in a controlled manner that it must be controlled, and since the pump is between the compartment and a fluid supply, it would be capable of controlling the volume of the compartment**).

In Reference to Claim 44:

Pugh as modified by Le Roy above teaches:

A sensor according to claim 43, wherein the control means is provided with a variety of predetermined fluid volumes corresponding to a variety of different anatomical conditions.

The data of the predetermined volumes has no functional relationship to the substrate of the invention, and as such is considered to be non-functional descriptive material which fails to limit the scope of the claim.

In Reference to Claim 57:

Pugh as modified by Le Roy above teaches:

A method of training examination according to claim 56, wherein the volume of fluid in the or each fluid containing compartment is altered(**Volume controlled by pump 62**) to present the user with a variety of simulations representing increasing anatomical complexity or increasing clinical difficulty.

The complexity or difficulty of the simulation has no functional relationship to the substrate of the invention, and as such is considered to be non-functional descriptive material which fails to limit the scope of the claim.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EVAN R. PAGE whose telephone number is (571)270-5049.

The examiner can normally be reached on Monday to Friday 7:30 A.M. to 5:00 P.M. EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Bomberg can be reached on (571)272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ERP
/Thor S. Campbell/
Primary Examiner, Art Unit 3742